

STATEMENT OF BASIS

as required by LAC 33:IX.3109, for draft **Louisiana Pollutant Discharge Elimination System Permit No. LA0038784; AI 19939; PER20060001** to discharge to waters of the State of Louisiana as per LAC 33:IX.2311.

The permitting authority for the Louisiana Pollutant Discharge Elimination System (LPDES) is:

Louisiana Department of Environmental Quality
Office of Environmental Services
P. O. Box 4313
Baton Rouge, Louisiana 70821-4313

- I. **THE APPLICANT IS:** Town of Benton
Benton Wastewater Plant
Post Office Box 1390
Benton, LA 71006

- II. **PREPARED BY:** Todd Franklin

- DATE PREPARED:** October 30, 2006

- III. **PERMIT ACTION:** reissue LPDES permit LA0038784, AI 19939; PER20060001

- LPDES application received: August 28, 2006

- EPA has not retained enforcement authority.

- Previous LPDES permit effective: April 1, 2002
- Previous LPDES permit expires: March 31, 2007

IV. **FACILITY INFORMATION:**

- A. The application is for the discharge of treated sanitary wastewater from a publicly owned treatment works serving the Town of Benton.

- B. The permit application does indicate the receipt of one industrial wastewater discharger, Benton Creosote.

- C. The facility is located at the west end of Sixth Street in Benton, Bossier Parish.

- D. The treatment facility consists of a single cell facultative lagoon with a rock-reed filter and chlorine disinfection.

- E. Outfall 001

Discharge Location: Latitude 32° 41' 20" North
 Longitude 93° 47' 0" West

Description: treated sanitary wastewater

Design Capacity: 0.3112 MGD

Type of Flow Measurement which the facility is currently using:

Combination Totalizing Meter / Continuous Recorder

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V. RECEIVING WATERS:

The discharge is into the Red River in segment 100101 of the Red River Basin. This segment is listed on the 303(d) list of impaired waterbodies.

The designated uses and degree of support for Segment 100101 of the Red River Basin are as indicated in the table below^{1/}:

Overall Degree of Support for Segment	Degree of Support of Each Use						
Partial	Primary Contact Recreation	Secondary Contact Recreation	Propagation of Fish & Wildlife	Outstanding Natural Resource Water	Drinking Water Supply	Shell fish Propagation	Agriculture
	Full	Full	Not Supported	N/A	Not Supported	N/A	Full

^{1/}The designated uses and degree of support for Segment 100101 of the Red River Basin are as indicated in LAC 33:IX.1123.C.3, Table (3) and the 2004 Water Quality Management Plan, Water Quality Inventory Integrated Report, Appendix A, respectively.

VI. ENDANGERED SPECIES:

The receiving waterbody, Subsegment 100101 of the Red River Basin, is not listed in Section II.2 of the Implementation Strategy as requiring consultation with the U. S. Fish and Wildlife Service (FWS). This strategy was submitted with a letter dated September 29, 2006, from Watson (FWS) to Brown (LDEQ). Therefore, in accordance with the Memorandum of Understanding between the LDEQ and the FWS, no further informal (Section 7, Endangered Species Act) consultation is required. It was determined that the issuance of the LPDES permit is not likely to have an adverse effect on any endangered or candidate species or the critical habitat. The effluent limitations established in the permit ensure protection of aquatic life and maintenance of the receiving water as aquatic habitat.

VII. HISTORIC SITES:

The discharge is from an existing facility location, which does not include an expansion beyond the existing perimeter. Therefore, there should be no potential effect to sites or properties on or eligible for listing on the National Register of Historic Places, and in accordance with the 'Memorandum of Understanding for the Protection of Historic Properties in Louisiana Regarding LPDES Permits' no consultation with the Louisiana State Historic Preservation Officer is required.

VIII. PUBLIC NOTICE:

Upon publication of the public notice, a public comment period shall begin on the date of publication and last for at least 30 days thereafter. During this period, any interested persons may submit written comments on the draft permit modification and may request a public hearing to clarify issues involved in the permit decision at this Office's address on the first page of the statement of basis. A request for a public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing.

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Public notice published in:

Local newspaper of general circulation

Office of Environmental Services Public Notice Mailing List

For additional information, contact:

Mr. Todd Franklin
 Permits Division
 Department of Environmental Quality
 Office of Environmental Services
 P. O. Box 4313
 Baton Rouge, Louisiana 70821-4313

IX.**PROPOSED PERMIT LIMITS:**

Subsegment 100101, Red River-Arkansas State Line to Alexandria, is listed on LDEQ's Final 2004 303(d) List as impaired for sulfates and color. To date no TMDLs have been completed for this waterbody. A reopener clause will be established in the permit to allow for the requirement of more stringent effluent limitations and requirements as imposed by a TMDL. Until completion of TMDLs for the Red River Basin, those suspected causes for impairment which are not directly attributed to the sanitary wastewater point source category have been eliminated in the formulation of effluent limitations and other requirements of this permit. Additionally, suspected causes of impairment which could be attributed to pollutants which were not determined to be discharged at a level which would cause, have the reasonable potential to cause or contribute to an excursion above any present state water quality standard were also eliminated.

Sulfates and Color

According to the 2004 305(b) Report, the sulfates impairment is attributed to sources outside state jurisdiction or borders and natural sources and the color impairment is attributed to upstream sources. Because the discharge consists of treated sanitary wastewater, which is not listed as a cause for the sulfates or color impairment, no requirements for these parameters shall be placed into the permit.

Final Effluent Limits:**OUTFALL 001**

Final limits shall become effective on the effective date of the permit, and expire on the expiration date of the permit.

Effluent Characteristic	Monthly Avg. (lbs./day)	Monthly Avg.	Weekly Avg.	Basis
BOD ₅	78	30 mg/l	45 mg/l	Limits are set in accordance with the Statewide Sanitary Effluent Limitations Policy (SSELP) for facilities of this treatment type and size discharging into the Red River.

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Effluent Characteristic	Monthly Avg. (lbs./day)	Monthly Avg.	Weekly Avg.	Basis
TSS	234	90 mg/l	135 mg/l	Limits are set in accordance with the Statewide Sanitary Effluent Limitations Policy (SSELP) for facilities of this treatment type and size discharging into the Red River.

Other Effluent Limitations:**1) Fecal Coliform**

The discharge from this facility is into a water body which has a designated use of Primary Contact Recreation. According to LAC 33:IX.1113.C.5.b.i, the fecal coliform standards for this water body are 200/100 ml and 400/100 ml. Therefore, the limits of 200/100 ml (Monthly Average) and 400/100 ml (Weekly Average) are proposed as Fecal Coliform limits in the permit. These limits are being proposed through Best Professional Judgement in order to ensure that the water body standards are not exceeded, and due to the fact that existing facilities have demonstrated an ability to comply with these limitations using present available technology.

2) pH

According to LAC 33:IX.3705.A.1., POTW's must treat to at least secondary levels. Therefore, in accordance with LAC 33:IX.5905.C., the pH shall not be less than 6.0 standard units nor greater than 9.0 standard units at any time.

3) Solids and Foam

There shall be no discharge of floating solids or visible foam in other than trace amounts in accordance with LAC 33:IX.1113.B.7.

X.**PREVIOUS PERMITS:**

LPDES Permit No. LA0038784: Effective: April 1, 2002

Expired: March 31, 2007

Effluent Characteristic	Discharge Limitations		Monitoring Requirements	
	Daily Avg.	Daily Max.	Measurement Frequency	Sample Type
Flow	Report	Report	Continuous	Recorder
BOD ₅	30 mg/l	45 mg/l	2/month	Grab
TSS	90 mg/l	135 mg/l	2/month	Grab
Fecal Coliform				
Colonies/100 ml	200	400	2/month	Grab
pH	Range (6.0 su – 9.0 su)		2/month	Grab

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XI. ENFORCEMENT AND SURVEILLANCE ACTIONS:**A) Inspections**

A review of the files indicates the following most recent inspection performed for this facility.

Date – December 9, 2004

Inspector – LDEQ

Findings and/or Violations -

1. The Town of Benton's WWTP is an oxidation pond with a rock-reed filter.
2. DMRs revealed satisfactory results.
3. Effluent samples are collected as required.
4. Operator completes pH analysis and a contract lab analyzes all other parameters.

B) Compliance and/or Administrative Orders

A review of the files indicates the following most recent enforcement action administered against this facility:

LDEQ Issuance:

Compliance Order

Enforcement Tracking No. WE-C-04-1168

Date Issued – June 8, 2005

Findings of Fact:

1. The Respondent owns and/or operates a POTW serving the Town of Benton which is located at the west end of Sixth Street in Benton, Bossier Parish, Louisiana. The Respondent was issued NPDES permit LA0038784 on May 10, 1996, which became effective on June 1, 1996, and which expired on May 31, 2001. In accordance with the Department's assumption of the NPDES program on August 27, 1996, NPDES permit LA0038784 became a LPDES permit. The Respondent submitted a permit renewal application to the Department on June 25, 2001. LPDES permit LA0038784 was reissued to the Respondent on March 18, 2002, with an effective date of April 1, 2002, and an expiration date of March 31, 2007. LPDES permit LA0038784 authorizes the Respondent to discharge treated sanitary wastewater to the Red River, waters of the state.
2. A file review on March 23, 2005, revealed two fecal coliform effluent limitations violations (one in June 2000 and the other in August 2000), as reported by the Respondent on DMRs.
3. A file review on March 23, 2005, revealed that the Respondent failed to submit DMRs as required by LPDES permit LA0038784. Specifically, the Respondent failed to submit monthly DMRs for the monitoring periods of May 2001, December 2002, January 2003, March 2003, June 2003, July 2003, September 2003, December 2003, and January through December 2004.
4. A file review on December 2, 2004, revealed that the Respondent failed to submit a permit renewal application in a timely manner. Specifically, the Respondent failed to submit a permit renewal application 180 days prior to the expiration date of May 31, 2001. The Respondent's permit renewal application was received by the Department on June 25, 2001, after the expiration date of the permit.
5. A file review on December 2, 2004, revealed that the Respondent discharged into waters of the state without a permit. Specifically, the Respondent's

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continued submittal of DMRs after the expiration of LPDES permit LA0038784 on May 31, 2001, revealed that the Respondent continued to discharge to waters of state without an LPDES permit.

6. Inspections on October 18, 2002, and October 12, 2004, in response to citizen's complaints, and on November 18, 2002, November 20, 2002, November 25, 2002, December 2, 2002, December 5, 2002, December 19, 2002, February 25, 2003, and April 28, 2004, investigating reported incidents, and a subsequent file review on March 23, 2005, revealed operations and maintenance deficiencies. Specifically, the inspections and the file review revealed overflows have occurred.
7. In a letter submitted to the Department by the Respondent on September 15, 2003, the Respondent indicated that a PVC force main which had broken on multiple occasions had been replaced with ductile iron pipe. The Respondent also indicated that an Industrial User, Benton Creosote Works, whose discharges were thought to be contributing to the problems with the previously PVC force main, was being closely monitored and that its discharges were in compliance with the Town of Benton's pretreatment requirements. In a subsequent letter submitted to the Department by the Respondent on April 13, 2004, the Respondent stated that repairs had been made to the Bay Hills lift station. The grinding system and pumps were repaired and re-installed.
8. A file review on December 2, 2004, revealed the Respondent failed to sample a required by LPDES permit LA0038784. Specifically, the Respondent submitted a DMR for the monitoring period of June 2002, on which it indicated a flow, but that no testing was done.

(Compliance Order WE-C-04-1168 also contained Finding of Facts for another facility permitted under LPDES permit LA0102890.)

Order:

1. To immediately take any and all steps necessary to achieve and maintain compliance with permit limitations and conditions contained in LPDES permit LA0038784.
2. To submit to the Enforcement Division properly completed DMRs for the monitoring periods mentioned in Paragraph 3 of the Findings of Fact portion listed above.
3. In the event the Respondent believes that complete correction of the above-cited deficiencies is not physically possible within 30 days, the Respondent shall submit a comprehensive plan for the expeditious elimination and prevention of such noncomplying discharges.
4. To submit to the Enforcement Division a copy of the Town of Benton's pretreatment program and the Town's Ordinance adopting and enforcing the pretreatment requirements which are implemented to prevent or eliminate pass-through and/or interference from industrial wastewater into the collection system and wastewater treatment plant.
5. To submit to the Enforcement Division a written report that includes a detailed description of the circumstances surrounding the cited violations and actions taken or to be taken to achieve compliance with the Compliance Order.

C) DMR Review

A review of the discharge monitoring reports for the period beginning January 2003 through August 2006 has revealed the following violations (please note the following DMRs were missing from the file: February 2003, April 2004, January 2005, February 2005, January 2006, February 2006, and March 2006):

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Parameter	Outfall	Period of Excursion	Permit Limit	Reported Quantity
pH	001	January 2003	Range (6.0 – 9.0 su)	DID NOT REPORT
BOD ₅ , Monthly Avg.	001	January 2003	78 lbs/day	DID NOT REPORT
BOD ₅ , Monthly Avg.	001	January 2003	30 mg/l	DID NOT REPORT
BOD ₅ , Weekly Avg.	001	January 2003	45 mg/l	DID NOT REPORT
TSS, Monthly Avg.	001	January 2003	234 lbs/day	DID NOT REPORT
TSS, Monthly Avg.	001	January 2003	90 mg/l	DID NOT REPORT
TSS, Weekly Avg.	001	January 2003	135 mg/l	DID NOT REPORT
Fecal Coliform, Monthly Avg.	001	January 2003	200 col./100 ml	DID NOT REPORT
Fecal Coliform, Weekly Avg.	001	January 2003	400 col./100 ml	DID NOT REPORT
pH	001	July 2003	Range (6.0 – 9.0 su)	DID NOT REPORT
BOD ₅ , Monthly Avg.	001	July 2003	78 lbs/day	DID NOT REPORT
BOD ₅ , Monthly Avg.	001	July 2003	30 mg/l	DID NOT REPORT
BOD ₅ , Weekly Avg.	001	July 2003	45 mg/l	DID NOT REPORT
TSS, Monthly Avg.	001	July 2003	234 lbs/day	DID NOT REPORT
TSS, Monthly Avg.	001	July 2003	90 mg/l	DID NOT REPORT
TSS, Weekly Avg.	001	July 2003	135 mg/l	DID NOT REPORT
Fecal Coliform, Monthly Avg.	001	July 2003	200 col./100 ml	DID NOT REPORT
Fecal Coliform, Weekly Avg.	001	July 2003	400 col./100 ml	DID NOT REPORT
BOD ₅ , Monthly Avg.	001	May 2006	30 mg/l	33.3 mg/l

XII.

ADDITIONAL INFORMATION:

Please be aware that the Department will be conducting a TMDL in the Red River Basin scheduled for completion in 2007. The Department of Environmental Quality reserves the right to impose more stringent discharge limitations and/or additional restrictions as a result of the TMDL. Therefore, prior to upgrading or expanding this facility, the permittee should contact the Department to determine the status of the work being done to establish future effluent limitations and additional permit conditions.

The nearest drinking water intake, Bossier City Waterworks, is located approximately 20 river miles downstream from the discharge point. Based on the size of the discharge and the distance from the nearest drinking water intake, there shall be no additional monitoring requirements placed into the permit.

Final effluent loadings (i.e. lbs/day) have been established based upon the permit limit concentrations and the design capacity of 0.3112 MGD.

Effluent loadings are calculated using the following example:

$$\text{BOD}_5: 8.34 \text{ lb/gal} \times 0.3112 \text{ MGD} \times 30 \text{ mg/l} = 78 \text{ lbs/day}$$

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At present, the Monitoring Requirements, Sample Types, and Frequency of Sampling as shown in the permit are standard for facilities of flows between 0.10 and 0.50 MGD.

Effluent CharacteristicsMonitoring Requirements

	<u>Measurement Frequency</u>	<u>Sample Type</u>
Flow	Continuous	Recorder
BOD ₅	2/month	Grab
Total Suspended Solids	2/month	Grab
Fecal Coliform Bacteria	2/month	Grab
pH	2/month	Grab

Pretreatment Requirements

Based upon consultation with LDEQ pretreatment personnel, general pretreatment language will be used due to the lack of either an approved or required pretreatment program.

Pollution Prevention Requirements

The permittee shall institute or continue programs directed towards pollution prevention. The permittee shall institute or continue programs to improve the operating efficiency and extend the useful life of the facility. The permittee will complete an annual Environmental Audit Report each year for the life of this permit according to the schedule below. The permittee will accomplish this requirement by completing an Environmental Audit Form which has been attached to the permit. All other requirements of the Municipal Wastewater Pollution Prevention Program are contained in Part II of the permit.

The audit evaluation period is as follows:

Audit Period Begins	Audit Period Ends	Audit Report Completion Date
Effective Date of Permit	12 Months from Audit Period Beginning Date	3 Months from Audit Period Ending Date

XIII**TENTATIVE DETERMINATION:**

On the basis of preliminary staff review, the Department of Environmental Quality has made a tentative determination to reissue a permit for the discharge described in this Statement of Basis.

XIV**REFERENCES:**

Louisiana Water Quality Management Plan / Continuing Planning Process, Vol. 8, "Wasteload Allocations / Total Maximum Daily Loads and Effluent Limitations Policy," Louisiana Department of Environmental Quality, 2005.

Louisiana Water Quality Management Plan / Continuing Planning Process, Vol. 5, "Water Quality Inventory Section 305(b) Report," Louisiana Department of Environmental Quality, 1998.

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Louisiana Administrative Code, Title 33 - Environmental Quality, Part IX - Water Quality Regulations, Chapter 11 - "Louisiana Surface Water Quality Standards," Louisiana Department of Environmental Quality, 2004.

Louisiana Administrative Code, Title 33 - Environmental Quality, Part IX - Water Quality Regulations, Subpart 2 - "The LPDES Program," Louisiana Department of Environmental Quality, 2004.

Low-Flow Characteristics of Louisiana Streams, Water Resources Technical Report No. 22, United States Department of the Interior, Geological Survey, 1980.

Index to Surface Water Data in Louisiana, Water Resources Basic Records Report No. 17, United States Department of the Interior, Geological Survey, 1989.

LPDES Permit Application to Discharge Wastewater, Town of Benton, Benton Wastewater Plant, August 28, 2006.